AMENDMENTS TO THE CLAIMS

1 (withdrawn): An apparatus for providing carbon dioxide to a plant, comprising:

(a) a chamber adapted to enclose at least a portion of said plant;

(b) a gas source capable of providing gas substantially free of carbon dioxide; and

(c) a carbon dioxide generator in fluid communication with said chamber and said gas source, said generator comprising a vessel containing an aqueous solution of at least one of hydrogen carbonate ions and carbonate ions.

2 (withdrawn): The apparatus of claim 1 wherein said generator further comprises an agitator capable of agitating said solution.

3 (withdrawn): The apparatus of claim 2 wherein said agitator is an inlet to said vessel in fluid communication with said gas source.

4 (withdrawn): The apparatus of claim 1 wherein said generator further comprises a fan.

5 (withdrawn): The apparatus of claim 1 wherein said generator has a loading section for addition of a solid source of at least one of hydrogen carbonate ions and carbonate ions.

6 (withdrawn): The apparatus of claim 1 wherein said chamber has a carbon dioxide content of from 0 to 4000 ppm.

7 (withdrawn): The apparatus of claim 1 wherein said generator further comprises a source of acid.

8 (original): A method for providing carbon dioxide to a plant, comprising:

(a) forming a chamber and enclosing at least a portion of said plant with said chamber;

(b) providing a gas source capable of providing a first gas substantially free of carbon dioxide;

(c) providing a carbon dioxide generator in fluid communication with said chamber and said gas source, said generator comprising a vessel containing an aqueous solution of at least one of hydrogen carbonate ions and carbonate ions;

(d) producing carbon dioxide from said aqueous solution; and

(e) mixing said carbon dioxide with said first gas to produce a gas mixture having a level of carbon dioxide and flowing said gas mixture into said chamber.

9 (original): The method of claim 8, further comprising the step of agitating said solution to produce said carbon dioxide.

10 (original): The method of claim 9 wherein said step of agitating said solution comprises flowing said first gas through said aqueous solution.

11 (original): The method of claim 8, further comprising the step of adding an acid to said solution to produce said carbon dioxide.

12 (original): The method of claim 8 wherein said generator further comprises a fan.

13 (original): The method of claim 8, further comprising the step of adding a solid source of at least one of hydrogen carbonate ions and carbonate ions to said generator.

14 (original): The method of claim 8 wherein said chamber has a carbon dioxide content of from 0 to 4000 ppm.

15 (original): A method for providing an elevated level of carbon dioxide to a plant culturing environment, comprising:

(a) forming an enclosure to surround said plant;

(b) providing a carbon dioxide generator in fluid communication with said enclosure, said generator comprising a vessel containing an aqueous solution of at least one of hydrogen carbonate ions and carbonate ions; and

(c) producing carbon dioxide from said solution in a sufficient quantity so as to elevate the level of carbon dioxide in said enclosure above ambient level.

16 (original): The method of claim 15, further comprising the step of agitating said solution to produce said carbon dioxide.

17 (original): The method of claim 16 wherein said step of agitating said solution comprises flowing a gas through said aqueous solution.

18 (original): The method of claim 15, further comprising the step of adding an acid to said solution to produce said carbon dioxide.

19 (original): The method of claim 15 wherein said generator further comprises a fan.

20 (original): The method of claim 15, further comprising the step of adding a solid source of at least one of hydrogen carbonate ions and carbonate ions to said generator.

21 (original): The method of claim 15, further comprising the step of flowing said aqueous solution through said vessel.

22 (original): The method of claim 15 wherein said enclosure is a greenhouse.

23 (original): A method for providing carbon dioxide to an environment, comprising:

(a) placing a carbon dioxide generator in said environment, said generator comprising a vessel containing an aqueous solution of at least one of hydrogen carbonate ions and carbonate ions;

(b) agitating said solution to produce carbon dioxide, wherein said carbon dioxide is produced without addition of acid to said aqueous solution; and

(c) producing carbon dioxide from said aqueous solution in a sufficient quantity so as to elevate the level of carbon dioxide in said environment.

24 (original): The method of claim 23 wherein said step of agitating said solution comprises flowing a gas through said aqueous solution.

25 (original): The method of claim 23 wherein said generator further comprises a fan.

26 (original): The method of claim 23, further comprising the step of adding a solid source of at least one of hydrogen carbonate ions and carbonate ions to said generator.

27 (original): The method of claim 23, further comprising the step of flowing said aqueous solution through said vessel.

28 (original): The method of claim 23 wherein said environment is a plant culturing environment.

29 (withdrawn): An apparatus for providing carbon dioxide, comprising:

(a) a vessel containing an aqueous solution of at least one of hydrogen carbonate ions and carbonate ions, said vessel comprising an agitation section;

(b) an agitator adapted to agitate said solution;

(c) a water source in fluid communication with said vessel for supplying water to said vessel; and

(d) said vessel having a drain to allow said aqueous solution to flow out of said vessel.

30 (withdrawn): The apparatus of claim 29, further comprising a loading section.

31 (withdrawn): An apparatus for generating carbon dioxide, comprising:

(a) a chamber;

(b) a carbon dioxide generator in fluid communication with said chamber, said generator comprising a first section containing an aqueous solution of at least one of hydrogen carbonate ions and carbonate ions and a second section containing an acidic solution; and

(c) a wick disposed between said first section and said second section.